

Attachment 1: Description of Emission Reduction Measure Form

Please fill out one form for each emission reduction measure. See instructions in Attachment 2.

Title: Use of Chicago Climate Exchange Forestry Protocols

Type of Measure (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Direct Regulation | <input type="checkbox"/> Market-Based Compliance |
| <input type="checkbox"/> Monetary Incentive | <input type="checkbox"/> Non-Monetary Incentive |
| <input checked="" type="checkbox"/> Voluntary | <input type="checkbox"/> Alternative Compliance Mechanism |
| <input type="checkbox"/> Other Describe: | |

Responsible Agency: ARB

Sector:

- | | |
|---|---|
| <input type="checkbox"/> Transportation | <input type="checkbox"/> Electricity Generation |
| <input type="checkbox"/> Other Industrial | <input type="checkbox"/> Refineries |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Cement |
| <input checked="" type="checkbox"/> Sequestration | <input type="checkbox"/> Other Describe: |

2020 Baseline Emissions Assumed (MMT CO₂E): 11

Percent Reduction in 2020: 10%

Cost-Effectiveness (\$/metric ton CO₂E) in 2020: 0

Description: Emissions reduction would be accomplished through additional net sequestration of carbon dioxide through working forests and associated carbon storage in long-lived wood products. By using the Chicago Climate Exchange (CCX) forestry protocols, all California forest landowners (both public and private) could easily register and use the existing trading platform.

Since working forests are a net revenue generator, there is no cost to the additional emissions reduction that would be applicable to AB32 implementation. Since CO₂e is currently trading at \$3-5/ton on the CCX, and working forests sequester at least double the amount of carbon annually as an unmanaged forest, a forest landowner, that currently does not actively manage their forest, could realize about 0.5-1.0 ton of carbon/acre/year to pool and trade. One ton of carbon is 3.67 tons of CO₂e at \$5/ton = \$18/acre/year. This may be sufficient incentive for some currently unmanaged productive California forestlands to be switched to active management.

Emission Reduction Calculations and Assumptions: Determining an actual number of acres that would be converted to active management is not possible. An estimated amount of 10% would be about 2 million acres of California's 19.6 million acres of productive forestlands that are not reserved.

Cost-Effectiveness Calculation and Assumptions: Working forests are a net revenue generator and thus the additional net sequestration and carbon storage in long-lived wood products is "free" to AB 32 emissions reduction.

Implementation Barriers and Ways to Overcome Them: Awaiting Chicago Climate Exchange to publish their forestry protocol.

Potential Impact on Criteria and Toxic Pollutants: There would be a small increase in NO_x and particulate matter associated with the harvest of trees and manufacture of wood products.

Name: Steven Brink
Organization: California Forestry Association
Phone/e-mail: 916-444-6592